Section:	Infrastructure Services	
Unit:	Servers, Services, Storage and Virtualization Unit	
Position Number:	065-623-1373-001	
Classification:	Systems Software Specialist II (Technical)	
Date:	April 20, 2016	

<u>Supervision:</u> Under the general supervision of the Servers, Services, Storage and Virtualization Unit Manager, the Systems Software Specialist II (Technical) (SSS II Tech.) works as a technical specialist solving the most difficult problems related to systems, application servers, network services and network policies. The incumbent trains/mentors unit staff, deals with complex issues, has the responsibility for planning, designing, and carrying out programs, studies and other work independently that relate directly with Servers, Services, Storage and Virtualization activities. The Unit Manager provides administrative direction with assignments in terms of broadly defined mission and functions.

Knowledge: The SSS II (Technical) must demonstrate extensive technical knowledge and experience in designing, implementing and supporting large and complex Server based computer systems with an in depth knowledge of Microsoft Windows Operating Systems platforms, Virtualization, Storage Area Networks (SAN), Virtual Desktop Infrastructure (VDI) and available LAN/WAN technologies. The incumbent demonstrates an ability to install, configure/test, deploy and administer physical and virtual network servers and virtual desktops. The incumbent must have knowledge and experience including but not limited to systems security policies, Transmission Control Protocol/Internet Protocol, Dynamic Host Configuration Protocol, Windows Internet Naming Service, Dynamic Domain Naming Service; wide and local area networks; and computing environments from centralized to Client/Server. The incumbent must have knowledge of and the ability to manage and oversee network and server monitoring and alerts, remote systems management techniques and products, capacity and contingency planning, backups and disaster recovery, technology upgrading and migrating of server infrastructure and related services. The incumbent must have the ability to manage moderately complex projects including knowledge of the Project Management Institute (PMI) knowledge areas and processes, perform completed staff work, develop status and various other reports. and formal written documentation of issues/risks either immediately or potentially impacting the CDCR's IT infrastructure and services. The incumbent must have the ability to develop formal and informal written/verbal communications for submittal/presentation to staff, customers, and all levels of management. The incumbent must have the ability to use a variety of analytical techniques to solve problems; must be able to perform thorough analysis of issues, situations, and conditions, draw valid conclusions, reach timely, constructive, and independent decisions (as appropriate); develop effective solutions and make sound recommendations to senior and executive level management. In addition to the knowledge and experience described above, the incumbent must possess expert level knowledge of three (3) of the technologies listed below with at least general knowledge of the remainder:

- Active Directory Administration;
- DHCP Administration;
- Backup Administration (Microsoft Data Protection Manager, Symantec Backup Exec, Net Backup);
- Microsoft Distributed File System and Replication (DFSR);
- Two Factor Authentication Systems (Radius, RSA etc.);
- Microsoft Office Communication Server;
- Microsoft Systems Center Configuration Manager (SCCM);
- Microsoft Certificate Authority Administration;

- HP Blade Chassis Configuration and Administration:
- VMware server virtualization platforms;
- VMware Virtual Desktop Infrastructure platform (VMware View);
- Storage Area Network (SAN) hardware configuration / design / utilization

<u>Guidelines:</u> The incumbent is aware that administrative and technical policies and precedents are applicable but are stated in general terms. Guidelines for performing the work are broadly stated and nonspecific requiring extensive interpretation. The incumbent will use initiative and resourcefulness in deviating from traditional methods or in researching emerging technologies to develop new methods, criteria, and/or new policies. The incumbent is recognized as a technical expert and authority in the development and interpretation of guidelines.

<u>Complexity:</u> The work includes varied duties requiring many different and unrelated processes and methods applied to a broad range of activities or substantial depth of analysis. The work requires originating new techniques, establishing criteria, or developing new information. The work also involves demonstrating exceptional leadership in identifying new issues and business opportunities and in assisting management with the most sensitive issues. Incumbents demonstrate an in-depth understanding of the relationship of their technical specialization and/or project responsibilities to the work as a whole. Incumbents are able to propose technical solutions within their scope of expertise, which take into account the customer's business needs. Presentations will typically be a routine function of the job.

<u>Scope/Effect:</u> The incumbent clearly demonstrates team leadership competencies and models the organization values in all activities. Primary responsibilities include senior consulting to development projects that have a significant impact on the organization's business success. The scope of work involves planning, developing and implementing technology. The incumbent has defined responsibility and authority for decision-making. Technical accountability for work done and decisions taken is expected. The ability to give technical or team leadership is demonstrated at this level with a high degree of technical versatility and broad industry knowledge. The scope of the work involves isolating and defining unknown conditions, using technologies to resolve critical problems and developing new applications for existing technologies. The work product or service provided affects the work of other experts, the development of major aspects of technology projects, programs or missions, or the products and services of substantial numbers of people. This is the work of a clearly defined expert.

<u>Personal Contact:</u> The incumbent consults and advises management, technical staff and system users to provide and make recommendations regarding systems and complex problems requiring resolutions. There is regular contact with IT staff, vendors, and external entities to coordinate problem resolution and ensure conformity of methods and practices. Incumbents contact users to discuss business and system requirements, contractors to provide oversight and contact vendors to discuss existing or new technology. The incumbent will communicate effectively, both orally and in writing, with subordinates, peers, clients and customers at all levels and demonstrate presentation skills.

<u>Purpose of Contact:</u> The incumbent will actively participate in meetings, conferences and presentations involving matters of significant consequence. Those contacted may have diverse goals requiring the incumbent to achieve a common resolution. The incumbent must be skillful in approaching the individual or group in order to obtain the desired response (i.e. obtain agreement where there is controversy and dissimilar goals).

<u>Duties:</u> The incumbent is the senior expert in performance of all the following tasks within the unit. The actual duties of the System Software Specialist II (Technical) platforms include, but are not limited to the following:

### 50% Systems Technical Lead Responsibilities

- Active Directory Administration;
- DHCP Administration;
- Backup Administration (Microsoft Data Protection Manager, Symantec Backup Exec, Net Backup);
- Microsoft Distributed File System and Replication (DFSR);
- Microsoft Internet Security and Acceleration Server (ISA);
- Two Factor Authentication Systems (Radius, RSA etc.)
- Microsoft Rights Management Server;
- Microsoft Systems Center Configuration Manager (SCCM);
- Microsoft Certificate Authority Administration;
- HP Blade Chassis Configuration and Administration;
- VMware server virtualization platforms;
- VMware Virtual Desktop Infrastructure platform (VMware View);
- Storage Area Network (SAN) hardware configuration / design / utilization;
- Disaster recovery/Business Continuity;
- Act as a consultant or technical advisor in meetings
- Conduct seminars, conferences, and presentations
- Conduct Training of new staff to various units in the Department
- Create/implement and/or modify service level agreements
- Prepare/review project status reports and project implementation plans
- Develop contingency plans
- Lead and Mentor the technical team of Systems Software Specialists
- Help in the supervision of the student assistant(s) working in the unit

# 30% Software Research, Evaluation/Analysis, Testing, Installation and Maintenance

- Evaluate, analyze, test, install and maintain software packages, operating systems and utilities
- Install any system/utility/application software for systems
- Maintain version control of Operating System Platforms and licenses
- Install and Test new operating system environments, software releases and patches
- Act as liaison with vendors to report/troubleshoot technical problems
- Coordinate and ensure effective operations of complex multiple hardware/software configurations
- Research by type and complexity of the hardware/software configuration
- Create and implement hardware/software migration/conversion procedures
- Identify and resolve problems with system and configuration software

#### 10% New Systems Design, Purchase and Installation

- Review and approve proposals and design packages
- Determine impact of new systems to existing systems
- Analyze and review the technical aspects of Feasibility Studies
- Evaluate, approve/reject new systems and third party software applications

- Set configuration standards and conventions
- Build and review logical and physical configuration models
- Create, test, and implement hardware/software installation procedures
- Create, test, and implement user defined commands/macros to facilitate user interaction and processing
- Perform post-implementation evaluation and review
- Create, test, and implement backup and recovery plans and procedures
- Create, test, and implement operational procedures for each system
- Create, test and implement disaster recovery plans and procedures
- Act as a technical advisor/consultant to other data processing personnel

### 10% Project Management

- Develop and Review Request for Proposals (RFP), Feasibility Study Reports (FSR), Post-Implementation Evaluation & Review (PIER);
- Assist in budgetary, contractual, and administrative requirements:
- Identify and apply requirements of oversight and regulatory agencies;
- Act as technical advisor to application development, database, operations and security staff
  in the use of special purpose vendor supplied application software utilities/features;
- Perform project management, reporting tasks and implementation plans;
- Create and implement policies, standards and procedures;
- Create and/or modify existing operating procedures;
- Conduct seminars, conferences, and presentations;
- Create/implement and/or modify service level agreements;
- Control and monitor time and staff expenditure on various systems projects;
- Develop contingency plans;
- Review backup procedures and their implementation for each system;
- Document systems configuration:
- Perform post-implementation evaluation reviews.

Employee:	Date:	
Immediate Supervisor:	Date:	